

REMARKS AND REBUTTAL OF CLAIM REJECTIONS

For the Examiner's convenience certain terms and words, in the following sections, are underlined, to indicate added emphasis.

In Section 3 of the Office Action, mailed on 05/03/2005, it is stated that Claims 2, 3 and 10 are rejected under 35.U.S.C. 101 as claiming the same invention as that of claims 1-3, respectively of prior U.S. Patent No. 6,198,777(the '777 patent). Applicant, in accordance with Section 2 of the Office Action, overcame the statutory type (35.U.S.C. 101) double patenting rejection by amending conflicting claims. Currently amended Claims 2, 3 and 10 claim distinct inventions from the inventions claimed in Claims 1-3 of the '777 patent. It is Applicant's position that the currently amended Claims 2, 3 and 10 are in an allowable form.

In Section 5 of the Office Action Claims 1-10 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For Claims 1-10, the Examiner explains the claim rejection reasons due to " lack antecedent basis". Applicant thanks the Examiner for his thorough review and specific comments. Claims 1-10 have been amended, and Applicant believes that these claims are in an allowable form.

In Section 7 of the Office Action Claims 1, 4-9 and 11-14 are rejected under 35 U.S.C 102(b) as being anticipated by Feher (5,784,402; art cited by applicant). Applicant, in the following paragraphs, presents rebuttal of rejection of Claims 1, 4-9 and 11-14 .

Rebuttal of Rejections of Claims 1, 4-9 and 11-14

In Section 7 of the Office Action it is stated:

"...Claims 1, 4-9 and 11-14 are rejected under 35.U.S.C. 102(b) as being anticipated by Feher (5,784,402; art cited by applicant). Regarding claims 1, 4-9 and 11-14, Feher, as shown in figures 3A-3C, 8, 9, 12, 14, 15 and 17-21, teaches a communication system for transmitting and receiving shaped clock signal including clock generator..."

After review of U.S. Pat.5, 784, 402 (for short, the '402 patent), including the Examiner cited figures and text, it is Applicant's position that the '402 patent does not disclose, does not teach and does not anticipate the following shaped clock elements/terms:

shaped clock signal, clock shaped system, shaped clock generator, clock shaping generator, clock generators which differ in clock parameters, clock modulated signals having changeable distances between the rising and falling edges..., shorter distance between the falling edge and rising edge of the clock...and /or related elements.

While the the'402 patent teaches shaped data signals and discloses shaping methods for data signals, it does not disclose shaped clock signal architectures, claimed in Claims 1, 4-9 and 11-14. Exemplary sections of the '402 patent, reproduced in the following paragraphs, illustrate the fact that while the '402 patent teaches shaped data signal embodiments, the '402 patent does not teach shaped clock signal implementations.

For example in Col. 17 lines 6-10 of the '402 patent it is stated:

"... Signal processors 1607I and 1607Q perform specified linear or nonlinear signal transformations of linear and/or nonlinear signal shaping and transformations of the baseband I and Q streams. ...". The term "signal shaping and transformations of the baseband I and Q streams" in the '402 patents refers to signal shaping of the data streams in the I and Q channels and does not mean shaping of clock signals.

An other example is from Col. 16 lines 43-54 of the '402 patent, where it is stated: "... Variable or equal shaped ramp on turn on and turn off signals in a cross correlated mode improve system performance. Conventional ramp on and ramp off signal generation without the use of cross correlated signals has been described in the prior art. The location of rise and fall time control devices 2011I, 2011Q could be within the I and Q paths as depicted in FIG. 20, or at the final output stages of the baseband processor at I_{OUT} and Q_{OUT} of FIG. 20 prior to the inputs of the quadrature modulator or after the Quadrature Modulator such as illustrated at the output of element 104 of FIG. 18, the drive signal of the Amplifier...". A closer examination of this part of the '402 specifications, in conjunction with other parts of the specifications and a review of the operation and embodiment of the '402 patents Fig.18 and Fig. 20 leads to compelling

evidence that the '402 patent teaches shaping of data signals and it does not teach and does not anticipate shaping of clock signals.

The term "signal shaping" and related terms, e.g. "signal shaping and transformations of the baseband" or "data shaping", in the '402 patent refer to shaping the data, or to data shaping, or to signal shaping, or to shaping the baseband data streams and not to shaping of clock signals". From the '402 patent and from other prior art it is well known that data shaping and or signal shaping refers to the fact that a data stream or data pattern is shaped resulting in shaped data or shaped signals. Shaped data transmission has been used in the prior art to band limit the signal spectrum.

Contrary to the teachings of "data shaping" in the prior art '402 patent and other prior art patents, in the current application and claims the emphasis is on "clock shaping". This emphasis on clock shaping is evidenced in multiple sections of the current Application and its parent patent U.S patent 6,198,777 (for short the '777 patent). For example, in Column 6 lines 46-57 of the '777 patent -it is stated:

"...In the FK processor and modulator specified clock, converted and clock shaped signal parameters are generated. These are based on the input data signal patterns and are generated by means of control signals, which are designed in the data input signal interface data signal and/or clock signal encoder units. The specified selectable clock signal parameters include symmetrical and non-symmetrical clock signals, shaped bandlimited continuous clock signal patterns, shaped encoded clock signals, variable rise and fall time clock signals and asynchronous clock signal information transmission means, where asynchronous clocking is referenced to the incoming data source signals....".

Another illustrative example in the '777 patent, regarding novelty on shaped clock signals (instead of data signal shaping), is in Column 4 lines 6-16 where it is stated that:

" ...Some of the fundamental novelties of this Feher Keying (FK) invention, as compared to the aforementioned prior art references including the Walker et al. patents and publications, are briefly highlighted in this paragraph. Methods and implementation strategies and circuits which generate shaped symmetrical and non-symmetrical clock signals, two level and multilevel non-symmetrical clock signals, variable rise and

different non-symmetrical fall time and/or other shaped clock signals and asynchronous clock signal information transmission means, where asynchronous clocking is referenced to the incoming data source signals are disclosed...” .

In short, the prior art '402 patent presents “data shaping” architectures, while the present application discloses fundamentally different “shaped clock” technologies and implementations.

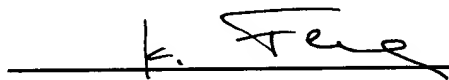
In summary, it is Applicant' s position that Feher 's U.S. patent 5,784,402 does not disclose, does not teach and does not anticipate the inventions claimed in Claims 1, 4-9 and 11-14.

With the explanations set out above, Applicant believes that all pending claims 1-14 have been placed in condition for allowance, and respectfully requests early and favorable action in the application. Should any additional remaining issues be identified that would prevent issuance of a Notice of Allowance, or other questions or concerns, the Examiner is urged to contact the undersigned Applicant at tel. 1-530-753-0738 or via e-mail to feherk@yahoo.com or Fax 1-530-753-1788.

Consideration toward early allowance and patent issuance is respectfully requested.

Signed this 11th day of July, 2005, at Tahoe City, California

RESPECTFULLY SUBMITTED,

A handwritten signature in black ink, appearing to read 'K. Feher', is written over a horizontal line.

Kamilo Feher, Applicant/Inventor

Please address all follow up correspondence to:

Kamilo FEHER

44685 Country Club Drive

El Macero, CA 95618

Telephone: 1-530-753-0738; Facsimile: 1-530-753-1788; E-mail: feherk@yahoo.com